



CAMERON-COLE

November 23, 2004

Ms. Stephanie Doolan
U.S. Environmental Protection Agency
Region VII
901 North 5th Street
Kansas City, Kansas 66101

444627



RCRA RECORDS

**RE: Scope of Work for Limited Delineation and Verification Soil Sampling
and Monitoring Well Installation
Clean Harbors Kansas, LLC
2549 New York Street, Wichita, Kansas
EPA Identification No: KSD007246846**

Dear Ms. Doolan:

Cameron-Cole, LLC (Cameron-Cole), on behalf of Clean Harbors Kansas (Clean Harbors), is presenting this scope of work to address several of the Kansas Department of Health and Environment's (KDHE) and U.S. Environmental Protection Agency (USEPA) comments on the *RCRA Facility Investigation Report* (January 2003). The proposed scope of work includes limited delineation and verification soil sampling and the installation of three additional monitoring wells at the Clean Harbors Kansas facility (the facility) in Wichita, Kansas.

This scope of work was discussed during the October 18, 2004 site meeting, and the November 3, 2004 conference call between KDHE, USEPA, Clean Harbors, and Cameron-Cole representatives. Following is a description of the work to be completed:

Delineation and Verification Soil Sampling

The primary objective of the limited soil sampling is to further delineate shallow soil impacts west of Soil Boring B-86, located in the western portion of the site, and to verify volatile organic compound (VOC) soil analytical results in the vicinity of Building J using USEPA Method 5035/8260B.

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The proposed soil boring locations are shown on Figure 1 and the detailed scope of work is described below:

- Based on the findings of previous site work, Cameron-Cole proposes to install two soil borings (B-110 and B-111) west of the vicinity of Soil Boring B-86 using a Geoprobe®. Three soil samples will be collected from the vadose zone of each boring at approximately 0 to 6-inches below ground surface, three feet below ground surface, and within three feet of saturated conditions. The samples will be submitted to Severn Trent Laboratory (STL) in Denver, Colorado for analysis of VOCs using USEPA Method 5035/8260B.
- To address KDHE's comments regarding previous soil sample collection methodology, Cameron-Cole proposes to collect two verification soil samples from previous boring locations B-31, B-96, B-100, and B-103 located the vicinity of Building J. Proposed soil boring locations are shown on Figure 1. The proposed borings will be designated with a "V" to indicate verification samples location.

These soil sample locations were selected to assess whether the detected concentrations of VOCs are biased low due to re-packing of soil samples into jars for off-site analysis. Two soil samples will be collected from the vadose zone of each boring at depths equivalent to the original sample depths. The samples will be submitted to STL in Denver, Colorado for analysis of VOCs using USEPA Method 5035/8260B.

Each soil boring will be advanced using a Geoprobe® and logged in the field by a Cameron-Cole geologist using the Unified Soil Classification Code (USCS). Table 1 lists each of the proposed boring locations, sampling depth, and analytical parameters.

Soil samples collected for analysis of VOCs will be handled in a manner which will minimize the loss of potential contaminants due to volatilization and biodegradation. Samples to be analyzed by USEPA Method 8260B will be prepared in the field and laboratory by USEPA Method 5035, referred to as the *Closed-System Purge and Trap and Extraction for VOCs*,

A coring device and sample storage device (Encore® sampler or equivalent) will be used to collect soil samples for VOC analysis. The Encore® sampler is used to collect a sub-sample, in the field, directly from the soil material obtained by the shallow soil sampling or drilling procedures. The plastic Encore® sampling device is pushed into the desired sample core interval using a T-handle, and a sub-sample is removed. Since the entire sub-sample is used for analysis, three Encore sub-samples (one high level – greater than 200 ppb and two for low level - less than

200 ppb) will be collected from each soil boring interval to be tested. Encore® samples will be packed in dry ice and shipped to the laboratory for overnight deliver.

Once in the laboratory each sample will be frozen in lieu of preservation with sodium bisulfate and/or methanol. Preserving the sample in the laboratory extends the holding time to 14 days from the time of sample collection.

Monitoring Well Installation

To further assess downgradient impacts associated with the facility, three additional monitoring wells are proposed at the facility. One shallow and one deep well will be installed along the southern property boundary to address the area downgradient of SWMU #7 and SWMU #24, and one shallow well will be installed approximately 180 feet downgradient of the facility, between Chisholm Creek and Interstate I-135, to assess the hydraulic effects that Chisholm Creek may have on contaminant migration. The proposed well locations are shown on Figure 1.

The proposed monitoring wells will be installed using the hollow-stem auger drilling method. The shallow wells will be installed to be approximately 23 to 25 feet below land surface with 10 feet of 2-inch diameter, Schedule 40 polyvinyl chloride (PVC), 0.010-inch slot well screen attached to an appropriate amount of PVC riser. The deep well will be installed to approximately 40 feet below land surface with 5-feet of 2-inch diameter, Schedule 40 PVC, 0.010-inch slot well screen attached to an appropriate amount of PVC riser.

At each well, a filter pack of silica sand will be placed in the annular space from the bottom of the borehole to approximately two feet above the well screen. A cap of bentonite pellets, approximately three feet thick will be placed on top of the sand pack and the remaining annular space will be filled to near land surface with neat cement grout.

The wells will be completed with locking water-tight caps and flush-mount covers. Wells will be developed shortly after completion. Each well will be developed by using swabs and submersible pumps until a relatively clear, sediment-free discharge is obtained. Development water will be containerized for appropriate disposal. Any soil or groundwater generated during the drilling should be drummed and transported to the Clean Harbors site for proper handling by the facility personnel.

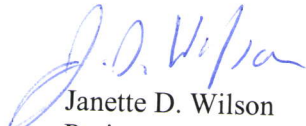
Schedule


Upon receipt of KDHE and USEPA final approval of this proposed work, Cameron-Cole will schedule the field program. Currently, it is Cameron-Cole's intention to conduct this work in conjunction with the second quarter of groundwater and surface water sampling (January 2005). The results of this additional investigation will be submitted to USEPA and KDHE in the form of an RFI Report Addendum by August 20, 2005.

We look forward to working with you on this project. Please call Janette Wilson at 303-938-5560 or Brian Martinek at 303-938-5530 if you have questions or require additional information.

Sincerely,

Cameron-Cole, L.L.C.


Janette D. Wilson
Project Manager


Brian C. Martinek
Senior Manager

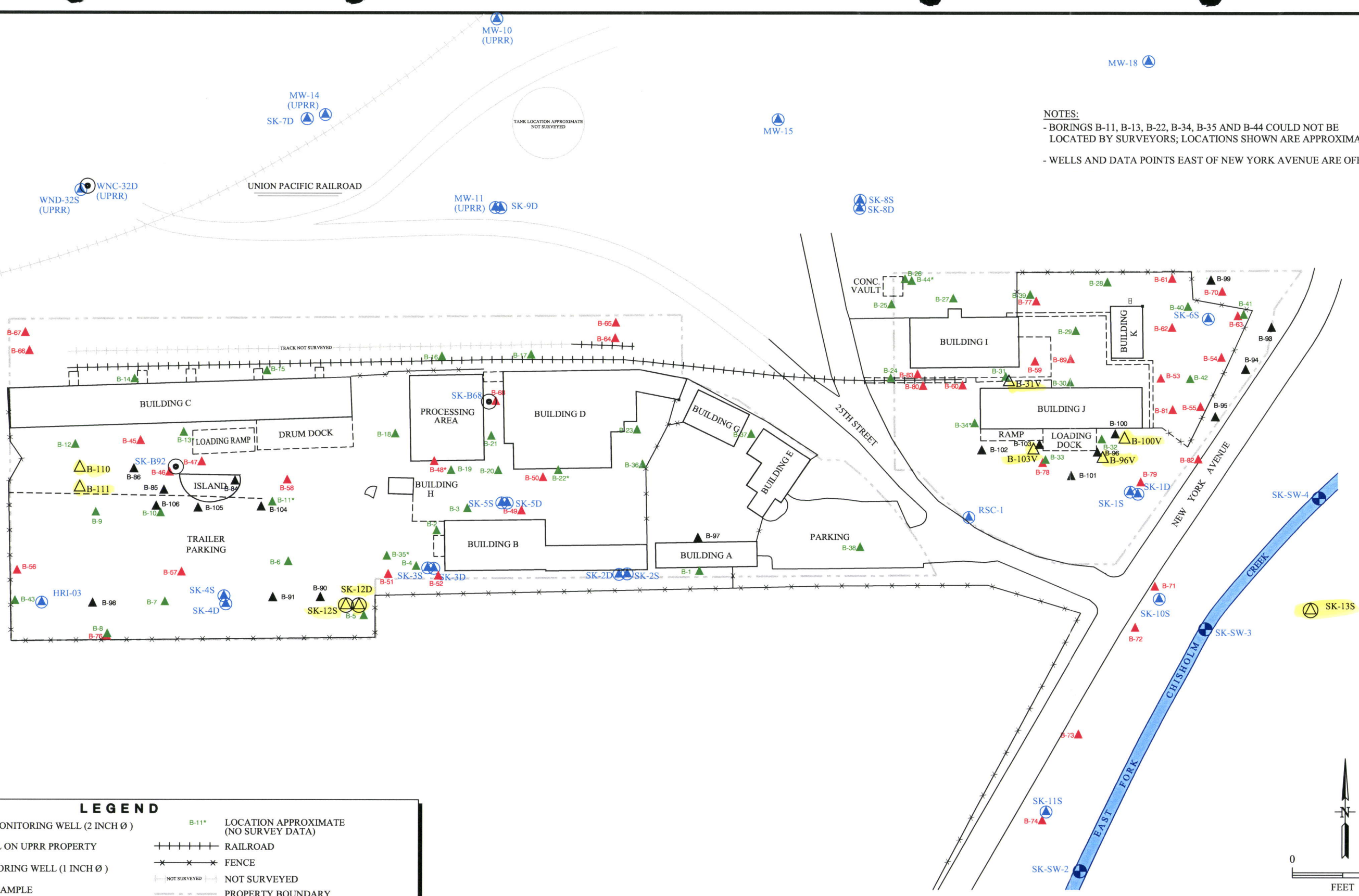
Enclosures

Figure 1
Table 1

cc: John Cook – KDHE
John Arbuthnot – Clean Harbors
Jeff McDermott - UPRR

Table 1
Sampling Details
Delineation and Verification Soil Sampling
Clean Harbors Kansas Facility
Wichita, Kansas

Boring Identification	Location Description	Soil Sample Depth			Soil Sample Analysis
		Ground Surface (0-6 inches)	Sample with highest PID from boring	Within 3 Feet of Saturated Conditions	Volatile Organic Compounds
B-31V	Area Southeast Bldg. I / North of Bldg. J		X	X	X
B-96V	Near Southeast Corner of Building J Loading Dock		X	X	X
B-100V	South of southeastern corner of Building J		X	X	X
B-103V	South of loading dock of Building J		X	X	X
B-110	South of Building C Loading Ramp/West of B-86	X	X	X	X
B-111	South of Building C Loading Ramp/West of B-86	X	X	X	X
Notes: B-31V - Verification Soil Boring Identification Soil Samples will be analyzed for VOCs by USEPA SW 846 Method 8260B, and collected and prepared in the laboratory using USEPA Method 5035, referred to as the <i>Closed System Purge and Trap and Extraction for VOCs</i> , June 1997.					



NOTES:
 - BORINGS B-11, B-13, B-22, B-34, B-35 AND B-44 COULD NOT BE LOCATED BY SURVEYORS; LOCATIONS SHOWN ARE APPROXIMATE.
 - WELLS AND DATA POINTS EAST OF NEW YORK AVENUE ARE OFF-SITE.

LEGEND

GROUNDWATER MONITORING WELL (2 INCH Ø)
 (UPRR) INDICATES A WELL ON UPRR PROPERTY
 GEOPROBE MONITORING WELL (1 INCH Ø)
 SURFACE WATER SAMPLE
 GEOPROBE SOIL BORING LOCATION (NOVEMBER 1999, PHASE I RFI)
 GEOPROBE SOIL BORING LOCATION (NOVEMBER 2001, PHASE II RFI)
 GEOPROBE SOIL BORING LOCATION (AUGUST 2002, PHASE III RFI)

B-11* LOCATION APPROXIMATE (NO SURVEY DATA)
 ++++++ RAILROAD
 - - - - - FENCE
 - - - - - NOT SURVEYED
 - - - - - NOT SURVEYED
 - - - - - PROPERTY BOUNDARY (NOT SURVEYED)
 PROPOSED CLEAN HARBORS MONITORING WELL
 PROPOSED CLEAN HARBORS SOIL BORING LOCATION ("V" INDICATES VERIFICATION SAMPLE LOCATION)

BY	DATE
DRAWN WRB	1/16/03
CHECKED	
APPROVED	
APPROVED	
APPROVED	

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FIGURE 1

EXISTING AND PROPOSED SOIL BORING AND MONITORING WELL LOCATIONS

CLEAN HARBORS KANSAS, LLC.

SCALE: 1" = 100'

DWG. NO.: 1808-12

SOURCE: CARLSON SURVEYING, APRIL 2, 2002